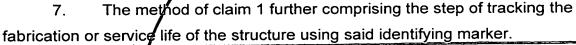
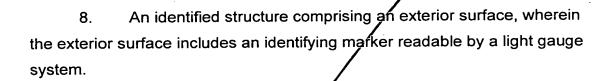




## WHAT IS CLAIMED IS:

- A method of self-referencing a structure having an exterior 1. mappable by a light gauge system, the method comprising the steps of: applying an identifying marker to the exterior of the structure; and creating a contour map representation of the structure such that said identifying marker forms part of said map representation.
- The method of claim 1 further comprising the step of: 2. indexing said contour map representation of the structure with said identifying marker in a searchable database.
- 3. The method of claim 1 wherein said identifying marker is established as a raised pattern on the exterior surface of the structure.
- The method of claim 3 wherein said raised pattern is formed by 4. machining the exterior surface of the structure to create said identifying marker.
- The method of claim 1 wherein said identifying marker is 5. established as a bar-code label adhesively applied to the exterior surface of the structure.
- The method of claim 1 wherein said identifying marker is a serial 6. pattern uniquely associated with the structure.
- 7.





- 9. The structure of claim 8 wherein said identifying marker is a raised serial pattern machined into the exterior surface of the structure.
- 10. The structure of claim 8 wherein said identifying marker is a coded label adhesively applied to the exterior surface of the structure.
- 11. The structure of claim 8 wherein the structure is a turbine bucket.
- 12. The structure of claim 8 wherein said identifying marker forms a part of a mapped and searchable computer-based representation of the structure.
- 13. The structure of claim 8 wherein said identifying marker is applied to a region of the exterior surface that is not critical for measurement of acceptance of the structure.